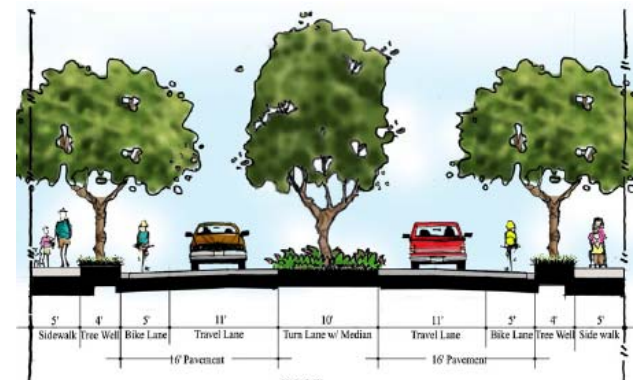
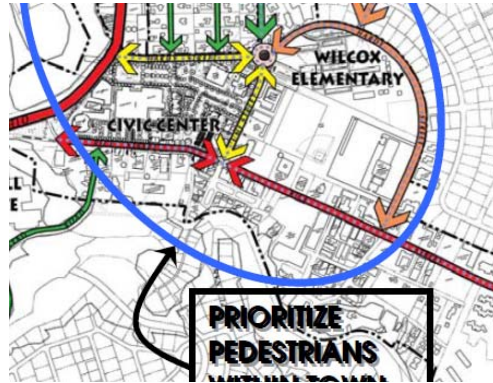


Līhu'e Town Core Mobility and Revitalization

A TIGER Application by the County of Kaua'i, Hawaii
June 2015



Bernard P. Carvalho, Jr.
Mayor



Nadine K. Nakamura
Managing Director

OFFICE OF THE MAYOR

County of Kaua'i, State of Hawai'i
4444 Rice Street, Suite 235, Līhu'e, Hawai'i 96766
TEL (808) 241-4900 FAX (808) 241-6877

June 3, 2015

The Honorable Anthony Foxx
Secretary, U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, D.C. 20590

Dear Secretary Foxx,

The County of Kaua'i is grateful for the opportunity TIGER provides to achieve our vision and transform our community. The Līhu'e Town Core Mobility and Revitalization application is a catalyst project to transform Līhu'e as the vibrant, pedestrian-friendly heart of our island.

Our vision is built on years of community planning and consensus building. This project completes ongoing efforts to provide safe, affordable, and sustainable multimodal transportation that supports economic revitalization of our town core. It promotes ladders of opportunity by providing access for disadvantaged populations to jobs, education, and essential services. It supports both the preservation of our rich historical places and a prosperous tomorrow for everyone.

As Mayor, my mission is "action with aloha." Partnership is essential to our success, and we are thankful for the many public and private partners, in diverse fields such as health, education, transportation, housing, and economic development, that have come together to support our efforts. We have a capable, experienced, and committed team in place to successfully complete this project.

Ho'okahi ka 'ilau like ana (Wield the paddles together – Work together). Let's get going!

With aloha,

Bernard P. Carvalho Jr., Mayor

SUMMARY OF CHANGES

The following changes were made between the pre-application and the final application:

- Undergrounding of utilities on Rice Street was deleted as a project component.
- Project cost estimates were updated and revised.
- The local match was adjusted.

APPLICATION SUMMARY

<i>Name of Project:</i>	Līhu‘e Town Core Mobility and Revitalization
<i>Applicant:</i>	County of Kaua‘i, Hawai‘i
<i>Urban/Rural Designation:</i>	Rural
<i>Primary Contact:</i>	Lee Steinmetz, Transportation Planner County of Kaua‘i 4444 Rice Street, Suite A473 Līhu‘e HI 96766-1326 808.241.4978 lsteinmetz@kauai.gov
Total Project Cost:	\$17,806,000
Non-Federal Funding:	\$ 2,675,000
TIGER Request:	\$15,131,000
DUNS:	113218945
TIGERID:	awooton278

REFERENCES

The following reports and websites are referenced in the Narrative.

County of Kauaʻi TIGER Project Website:

<http://www.kauai.gov/Government/OfficeoftheMayor/TIGERGrant/tabid/192/Default.aspx>

Other Reports and Websites

Census data: <http://quickfacts.census.gov/qfd/states/15/1545200.html>

CMF Clearinghouse: www.cmfclearinghouse.org

Community Health Needs Assessment and Community Health Improvement Initiative: <http://health.hawaii.gov/kauai/>

County of Kauaʻi general website: <http://www.kauai.gov/>

County of Kauaʻi *Multimodal Land Transportation Plan:* http://movekauai.net/?page_id=520

FHWA Road Diet Informational Guide: http://www.safety.fhwa.dot.gov/road_diets/info_guide/

Get Fit Kauaʻi: <http://getfitkauai.com/>

Hawaiʻi Department of Education: <http://www.hawaiipublicschools.org/Pages/home.aspx>

Hawaiʻi Department of Transportation: <http://hidot.hawaii.gov/>

Housing plus Transportation Index: <http://htaindex.cnt.org/map/>

Līhuʻe Business Association: <https://www.facebook.com/groups/761852760516442/>

REFERENCES

Līhu‘e Community Plan: <http://lihuecp.com/>

Līhu‘e Town Core Urban Design Plan:

<http://www.kauai.gov/Government/Departments/PlanningDepartment/Projects/LihueTownCoreUrbanDesignPlan/tabid/546/Default.aspx>

“Missing Middle” housing: <http://missingmiddlehousing.com/>

Smart Growth America Technical Assistance Parking Audit Workshop: (<http://www.smartgrowthamerica.org/2014/06/10/county-of-kauai-hi-seeks-parking-solutions-for-lihue-town-core/>)

State of Hawai‘i *Physical Activity and Nutrition Plan:* <http://health.hawaii.gov/physical-activity-nutrition/files/2013/08/Hawaii-PAN-Plan-2013-2020.pdf>

The Kaua‘i Bus schedules:

<http://www.kauai.gov/Government/Departments/TransportationAgency/BusSchedules/tabid/208/Default.aspx>

TABLE OF CONTENTS

PROJECT DESCRIPTION	1
Overview	1
Project Beneficiaries	4
Transportation Challenges.....	5
Ladders of Opportunity.....	7
Project Components in Detail	9
 PROJECT LOCATION	 16
 PROJECT PARTIES	 18
 GRANT FUNDS	 19
Importance of TIGER Funding to Complete the Project	20
 SELECTION CRITERIA.....	 21
Safety	21
State of Good Repair	21
Economic Competitiveness.....	22
Quality of Life.....	23
Environmental Sustainability	24
Innovation	24
Partnership.....	25
 RESULTS OF BENEFIT COST ANALYSIS	 26
Safety	26
State of Good Repair	26
Economic Competitiveness.....	27
Quality of Life.....	27
Environmental Sustainability	27

TABLE OF CONTENTS

PROJECT READINESS	28
Technical Feasibility	28
Financial Feasibility	28
Project Schedule	29
Required Approvals.....	29
Project Risks and Mitigation Strategies	30

APPENDICES

- A. Federal Wage Rate Certification*
- B. Benefit Cost Analysis Worksheets*
- C. Project Cost Estimates*
- D. Project Schedule*
- E. Letters of Support from Project Parties*

* Submitted as separate attachments

This document is intended to be printed in landscape format, double-sided with short-edge binding.

PROJECT DESCRIPTION

Overview

The County of Kaua'i is requesting TIGER funds to complete the Līhu'e Town Core Mobility and Revitalization Project. The Līhu'e town core was once the thriving commercial, civic and cultural heart of our island. Over time, with commercial activity moving to suburban locations, department stores gave way to thrift stores and ice cream parlors turned into used car lots. Once beautiful and stately historic buildings have peeling paint and false facades that hide their beauty and historic significance. Widened four-lane streets with high speeds separate neighborhoods from schools, services, and jobs. People rarely walk due to disconnected sidewalks and unsafe street crossings.

With interest in recreating a vibrant town center, things are beginning to change. Streets are being designed for walking, bicycling, and transit. Businesses are recognizing the value of the area and investing in renovation of historic buildings.

This rural TIGER project completes the transportation infrastructure required to transform this automobile-oriented and aging town center into the thriving commercial, civic, and cultural heart of our island. It improves connectivity and safety for motorists, bicyclists, pedestrians, and transit users. It provides ladders of opportunity by improving access for low-to-moderate income populations as well as seniors to education, employment, and services. It serves as a catalyst for the economic revitalization of our historic town center. It expands transit services and convenient connections within Līhu'e and to other parts of our island. And it builds on the partnerships that have contributed to the vision of a vibrant pedestrian-friendly, mixed-use town center.

The total cost of TIGER-funded project components is estimated at \$17,806,000. The non-Federal match is \$2,675,000. The amount of TIGER funding requested is \$15,131,000. The local match is 15% of the total project cost.



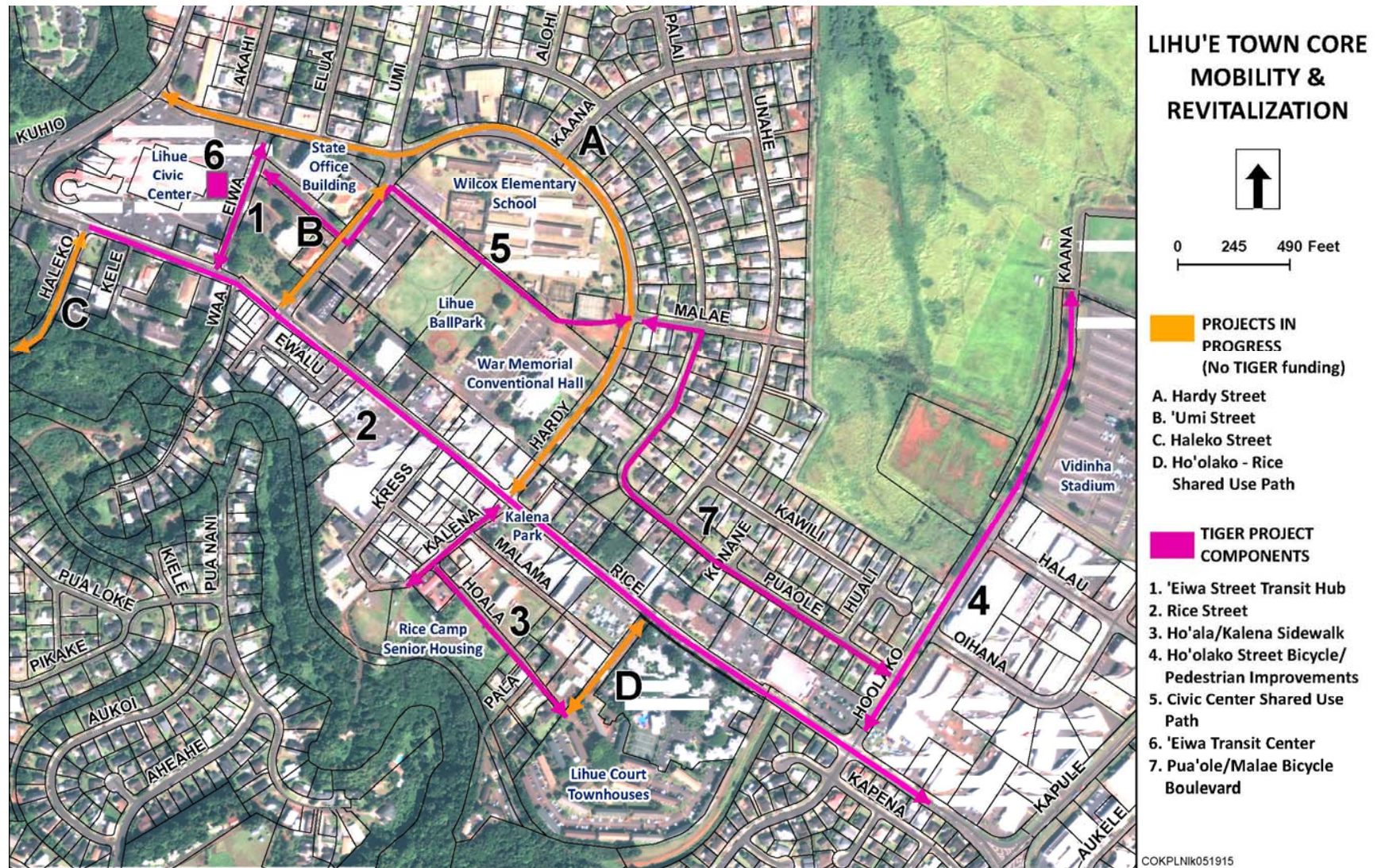
Līhu'e Town Core today...



...transformed by TIGER to a vibrant pedestrian-friendly center



PROJECT DESCRIPTION



Project Components

PROJECT DESCRIPTION

TIGER Project Components

The map on the previous page illustrates the project's components. Project components for which rural TIGER funding is being requested include the following (listed in order of priority):

1. Conversion of Eiwa Street to a transit hub;
2. Rice Street road diet and streetscape improvements;
3. Sidewalks on Hoala and Kalena Streets;
4. Hoolako Street bicycle and pedestrian improvements;
5. Civic Center to Convention Hall shared use path;
6. Civic Center Transit Services; and
7. Puaole and Malae Streets bicycle boulevard.

Other Project Components

TIGER funding will complete the project that is already in progress. Other components of the overall project that are already in progress and are fully funded (no request for TIGER funds) include the following:

- A. Hardy Street complete streets improvements;
- B. Umi Street restripe;
- C. Haleko Street restripe;
- D. Hoala Street to Rice Street shared-use path.



Proposed Rice Street improvements include bike facilities, widened sidewalks and enhanced pedestrian crossings.

PROJECT DESCRIPTION

Project Beneficiaries

Residents of Līhu'e

Transformative benefits for the residents of Līhu'e include transportation choice (the ability to choose walking, bicycling or transit instead of driving), enhanced social spaces in the town core, and a revitalized town core with more housing choice, thriving businesses, and services within walking distance.

Low-to-Moderate Income Residents

Transformative benefits for low-to-moderate income residents include multimodal access to jobs, education, recreation, and services.

Seniors

Transformative benefits for seniors include multimodal access to services, recreation, and cultural facilities.

Employees

Transformative benefits for employees include transportation choice for getting to and from work and improved access to restaurants, shopping, and services.

Kaua'i County Residents

Kauai County residents will enjoy better access to services, shopping, and restaurants when they visit Līhu'e.

Tourists

Tourists will appreciate the Līhu'e town core as a vibrant destination and will contribute to its economic revitalization by shopping and dining.



PROJECT DESCRIPTION

Transportation Challenges

Safety

Safety is the primary concern for the project area. According to 2009-2011 data from the Hawai'i Department of Transportation (HDOT), three intersections on Rice Street have had at least three accidents in three years. In addition, a pedestrian fatality occurred on Rice Street in 2014. Rice Street's existing four-lane configuration with through/left turn lanes leads to sight line problems at intersections and crosswalks for drivers and pedestrians. The outside lanes double as parking lanes during non-peak hours. With cars parked in the outside lanes, and cars turning left in the inside lanes, through drivers swerve from lane to lane at high speeds, causing unsafe conditions for drivers, pedestrians, and cyclists.

The proposed "road diet" for Rice Street will improve sight lines and reduce conflicts at intersections. Traffic calming strategies, including medians, landscaping, and curb extensions, will encourage slower speeds. Curb extensions will also reduce pedestrian crossing distance. Bicycle lanes or shared lane markings (depending on location), will provide a safer environment for cyclists and additional traffic calming. 2012 traffic counts on Rice Street near Umi Street show Average Daily Traffic (ADT) at 13,319 vehicles, well within the capacity range of similar road diets.

Safe Routes to School

Wilcox Elementary School is located on Hardy Street and serves many neighborhoods within walking or bicycling distance. As reported during interviews with school officials and in surveys, many parents do not feel it is safe for children to walk or bike to school due to lack of pedestrian and bicycle facilities.

Current construction is transforming Hardy Street to become a complete street with sidewalks, bike lanes, and enhanced street crossings. By connecting to the Hardy Street improvements, the TIGER project will complete safe pedestrian and bicycle access from neighborhoods to Wilcox Elementary School.

Bicycle/Pedestrian Infrastructure

In addition to Safe Routes to School, public comments during the development of the Līhu'e Community Plan and Rice Street concept plans focused on the lack of sidewalks and bicycle facilities. While work, school, parks, and shops are all within walking or bicycling distance for most Līhu'e residents, the vast majority drive because they do not feel it is safe to walk or bike.

The project focuses on improving the bicycle and pedestrian network throughout the Līhu'e town core area.

PROJECT DESCRIPTION

Transit

The existing Hardy Street bus stop serves as the transit hub for Līhu'e, connecting to mainline routes serving the entire island plus a local circulator. The existing stop has limited seating and weather protection, no bicycle parking facilities, and limited space for bus pick-up and drop-off. While restrooms at the adjacent civic center are available to bus patrons during regular business hours, there are no restrooms available during early morning or evening hours. Bus arrivals and departures on Hardy Street add to Hardy Street congestion. Primary transit services, such as the purchase of bus passes, lost and found, and other customer service functions are located at the remote Kaua'i Bus baseyard, making access difficult for bus patrons.

As a part of the Hardy Street project, currently under construction, the Hardy Street bus stop is being relocated to Eiwa Street, where there is ample room for expansion of bus service, and where buses can have priority use without contributing to traffic congestion or creating conflicts with bicyclists on Hardy Street. Only a small part of Eiwa Street near the Hardy Street intersection is being constructed as a part of the Hardy Street project. The conversion of Eiwa Street to a transit hub will be completed as a part of the proposed TIGER project. In addition, transit services are proposed to be relocated to new offices at the civic center adjacent to the Eiwa Street transit hub, including restrooms accessible to bus patrons during all bus operating hours.

Parking

A recent parking audit workshop conducted with technical assistance from Smart Growth America (funded by the Environmental Protection Agency) revealed that parking supply is adequate in the Līhu'e town core, but better parking management is needed, including sharing existing parking resources rather than building expensive parking structures. The proposed Civic Center to Convention Hall Shared Use Path will link valuable existing parking resources at the Civic Center and Veterans Memorial Convention Hall. While not far from each other, the lack of a direct walking facility between the two sites limits shared use. Improved pedestrian facilities and street crossings on Rice Street will also enable shared parking to support revitalization of the town core.



Rice Street 4-lane configuration



Sidewalks to nowhere



Nowhere to bike

PROJECT DESCRIPTION

Ladders of Opportunity

This project will improve non-automobile access to jobs, education, and social services for low-to-moderate income populations and seniors. 52% of the population in block groups 150070405001, 150070405002 and 150070405004 served by the project qualify as low-to-moderate income. Specific housing projects that will benefit include Līhu'e Court Townhomes, an affordable housing community with 173 units, and Kaniko'o Senior Housing, which at build-out will provide 90 residential units for low-to-moderate income seniors. Both of these developments are located on Hoala Street.

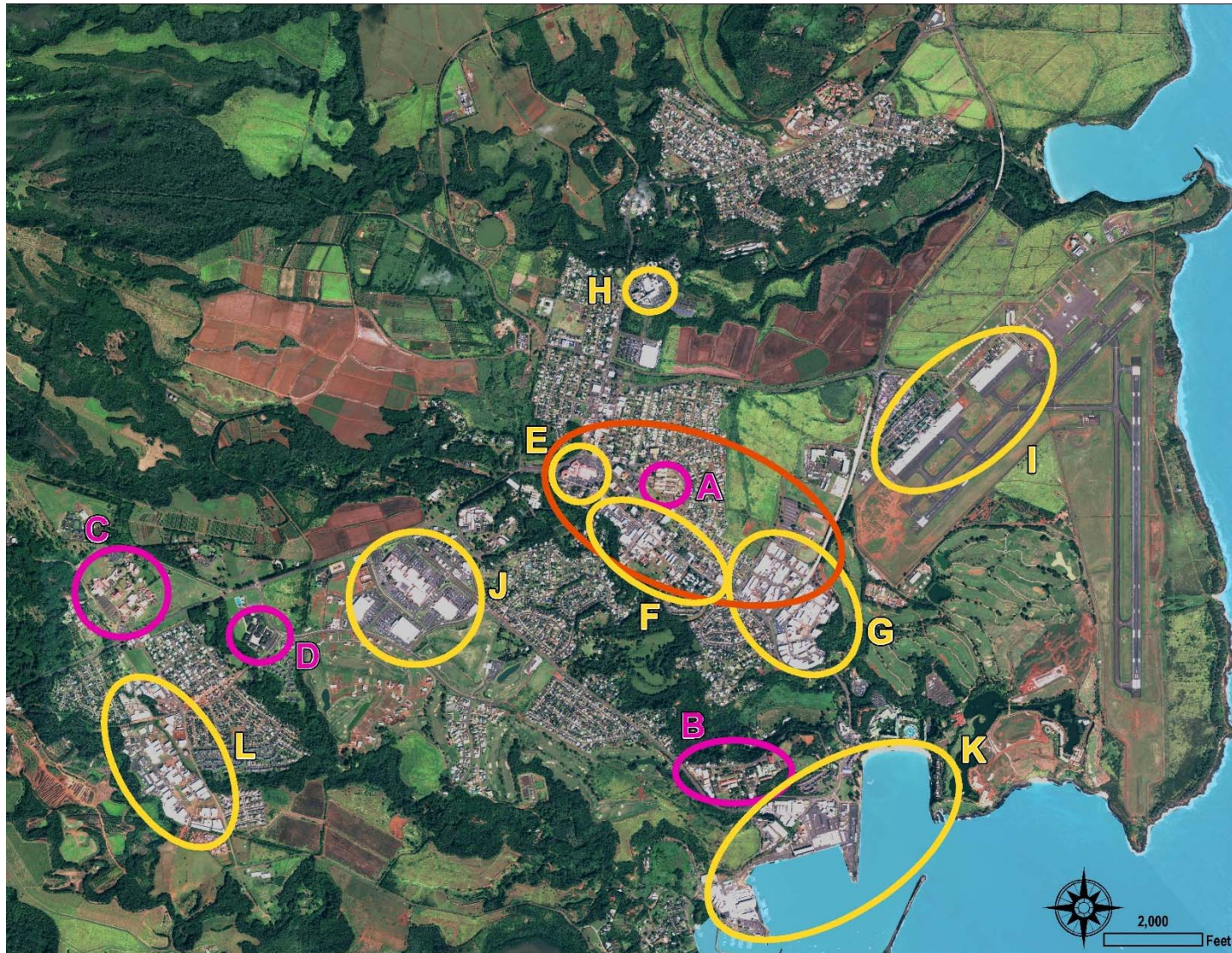
Līhu'e Court Townhomes is within walking distance to Wilcox Elementary School, but walking is difficult due to lack of sidewalks and safe pedestrian crossings. Sidewalks that have been constructed along the Kaniko'o Senior Housing frontage currently don't connect to anything. The proposed sidewalks on Hoala and Kalena Streets, the shared use path between Hoala and Rice Street being constructed with CDBG funds, and improved pedestrian crossings at Rice Street will provide complete connections not only to Wilcox School, but also to jobs, cultural facilities, social services, shopping, and parks.

The improved transit services on Eiwa Street, and improved bus stops with shelters on Rice Street, all within walking distance from both Līhu'e Court Townhomes and Kaniko'o Senior Housing, will provide access to regional adult education at Kauai Community College, and jobs at industrial parks and commercial districts. These regional education and employment destinations are also within biking distance and will be accessible through the improved bicycle network proposed by this project.

In addition to existing services and education facilities, a new Creative Technology Center is proposed to be built in the Līhu'e town core adjacent to the existing Convention Hall. This center will provide opportunities for jobs and training in multimedia technology, all within walking distance of underserved populations.

Another important challenge for the County of Kauai is the lack of workforce housing. Many people don't qualify for subsidized housing, but with a median home price in Līhu'e of \$463,800 (<http://quickfacts.census.gov/qfd/states/15/1545200.html>) many working people can't qualify to purchase or even rent the single family homes available on the market. Many young adults and families are forced to live with their parents or grandparents due to a lack of affordable housing. Often called the "missing middle", housing products for this population of moderate-income working people are nearly non-existent. The streetscape improvements on Rice Street will support mixed-use commercial and residential development that provides this essential missing middle housing type. (<http://missingmiddlehousing.com/>)

PROJECT DESCRIPTION



LIHUE TOWN CORE MOBILITY & REVITALIZATION PLAN ACCESS TO EDUCATION & JOBS

Multimodal access from
neighborhoods in &
near the project area



Project Area

Education Centers

- A** Wilcox Elementary School
- B** Kauai High School
- C** Kauai Community College
Island School
Kawaikini Public Charter School
- D** Chiefess Kamakahalei Middle School

Employment Centers

- E** Civic Center
- F** Rice Street
- G** Lihue Industrial Park
- H** Wilcox Hospital
- I** Lihue Airport
- J** Kukui Grove Shopping Center
- K** Nawiliwili Harbor
- L** Puhi Industrial Park

cdp0100115

PROJECT DESCRIPTION

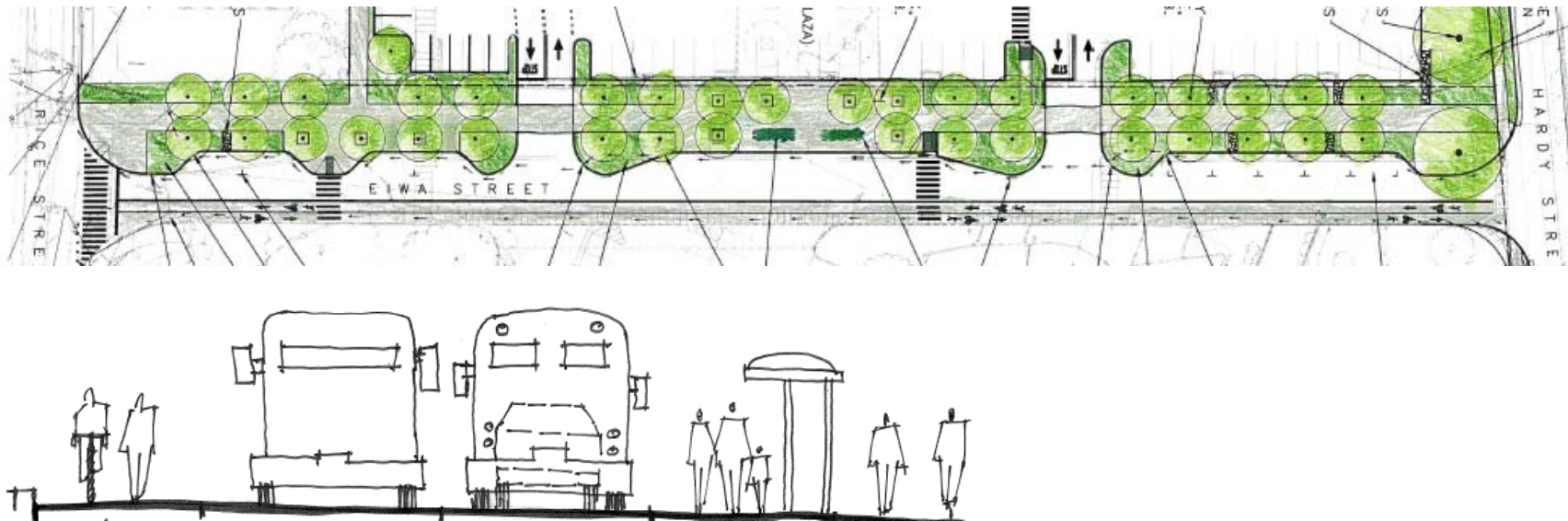
Project Components in Detail

1. Conversion of Eiwa Street to a transit hub. Estimated cost: \$2,425,000

Eiwa Street is currently a two-way street between Hardy and Rice Streets (approximately 700 lineal feet). The street bisects the Līhu'e Civic Center, which includes County offices, the Historic County Building (County Council services and Council chambers) and State offices. The Līhu'e Civic Center Master Plan calls for the development of more of a campus feel by enhancing green space, reducing the use of Eiwa Street by cars, and creating strong pedestrian connections between the buildings that are separated by Eiwa Street.

The proposed project will convert Eiwa Street to one-way and use the existing right-of-way to create a 10-foot wide pedestrian promenade, bus turnouts and shelters, one 10-foot wide travel lane, and two-way bike lanes. In addition to an enhanced pedestrian and bicycle corridor, Eiwa Street will become the primary transit hub for all of Kaua'i and the primary transit stop serving Līhu'e Town. The proposed layout of the street allows for expanded bus service in the future. The existing bus stop, currently on Hardy Street, will be relocated to Eiwa Street. Relocation of the bus stop will also reduce congestion and conflict on Hardy Street, currently under construction as a complete street.

Approximately 200 lineal feet of Eiwa Street will be constructed as a part of the Hardy Street project. The remaining 500 lineal feet, including the main transit hub and a 10 foot wide pedestrian walkway to the proposed transit center (see project component 6 below), will be completed as a part of the TIGER project.



PROJECT DESCRIPTION

2. Rice Street Road Diet and Streetscape Improvements. Estimated cost: \$8,573,000

The Līhu'e Town Core Urban Design Plan calls for Rice Street to be the center of revitalization with higher-density, mixed use development and a vibrant pedestrian environment.

The project will reconstruct Rice Street as a complete street. The proposed Rice Street design extends from Haleko Road to approximately mid-block beyond Hoolako Street, where Rice Street becomes a State road. The total length of Rice Street in the project area is approximately 4,600 feet. The proposed section for Rice Street varies through each block depending on the specific needs for on-street parking, bicycle facilities, the pedestrian environment and other factors. Rice Street also serves as the County's primary parade route, so accommodations for large floats and marching bands have been taken into account. Generally, the Rice Street features include the following:

- Restriping Rice Street with one through lane in each direction, designated left turns at intersections, and two-way left turn lanes at mid-block driveways (travel and turn lane widths are 10 feet);
- Bike lanes in areas where on-street parking is not needed to support commercial revitalization (civic center area);
- Shared lane markings and on-street parking in the historic commercial core to support commercial revitalization;
- Curb extensions at select intersections and mid-block crossings; and
- Landscaped medians at select locations.



Rice Street near the Civic Center with bike lanes



Rice Street near historic commercial center with on-street parking

PROJECT DESCRIPTION

3. Sidewalks on Hoala and Kalena Streets - Estimated Cost: \$358,000

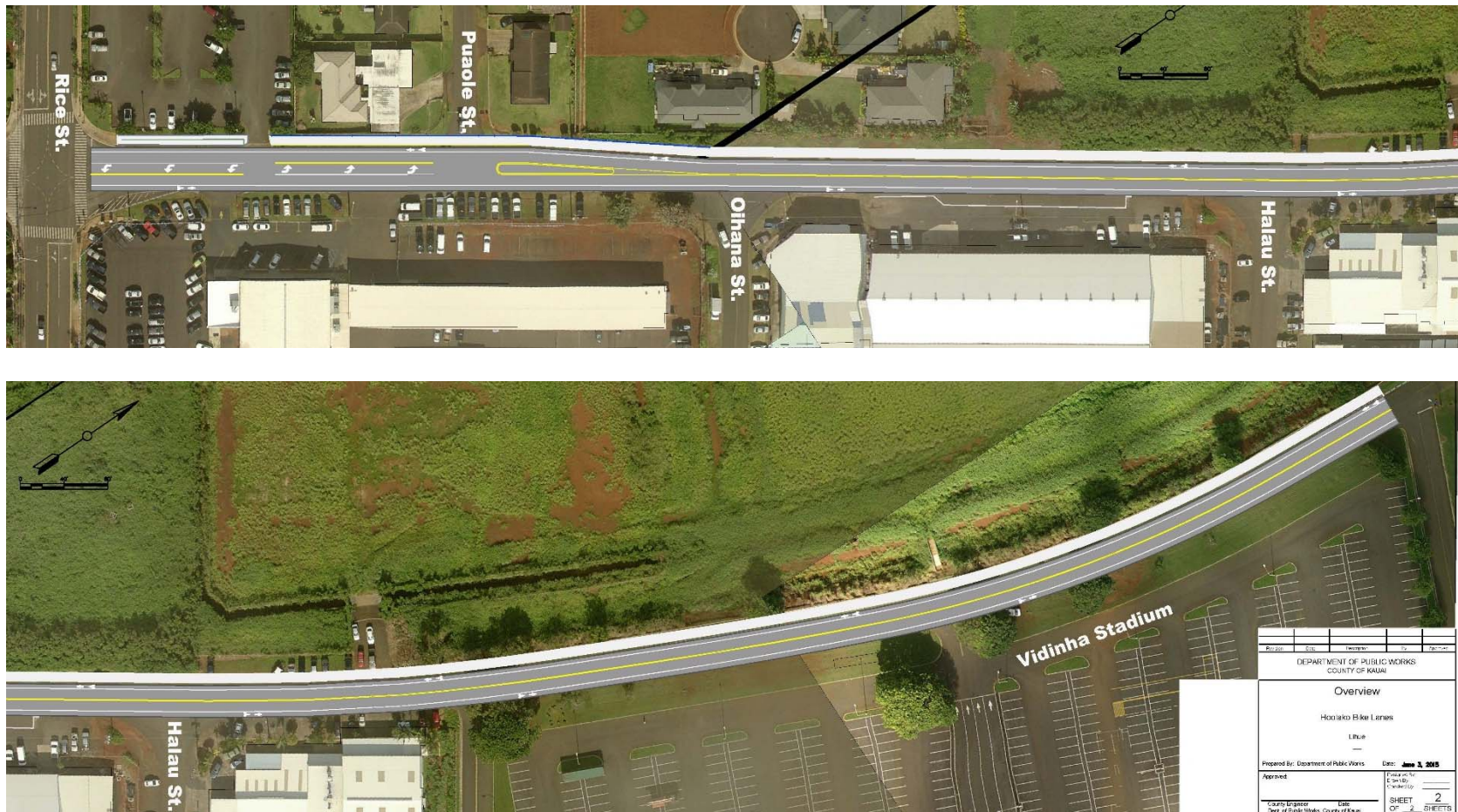
The proposed project will construct approximately 2,000 lineal feet of sidewalk on Hoala and Kalena Streets. These sidewalks will provide safe pedestrian connections to Rice Street, Civic Center services, parks, transit and Wilcox Elementary School, including for residents of Līhu'e Court Townhomes and Kaniko'o senior housing. Proposed sidewalks will connect to recently constructed sidewalks along the frontage of Kaniko'o senior housing, and will complete sidewalks on Hoala Street from Kalena Street to the Līhu'e Court Townhomes entrance, and on Kalena Street from Rice Street to just past Hoala Street.



PROJECT DESCRIPTION

4. Hoolako Street Bicycle and Pedestrian Facilities - Estimated Cost: \$2,820,000

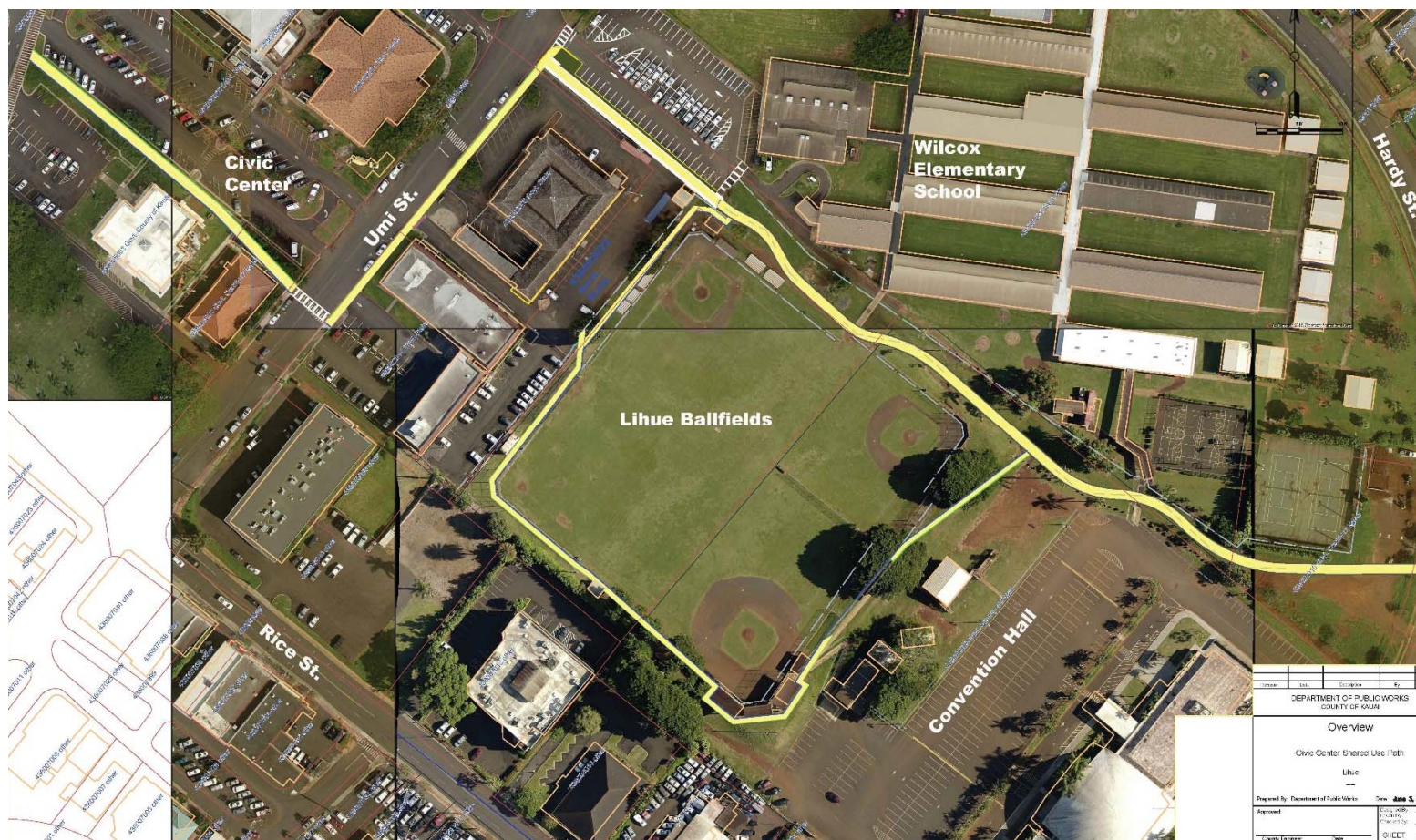
The project will construct an 8-foot wide sidewalk on one side and bike lanes on both sides of Hoolako Street from Rice Street to Vidinha Stadium, approximately 2,300 feet in length. These facilities will connect neighborhoods and Rice Street to jobs in the Līhu'e Industrial Park adjacent to Hoolako Street, and to Vidinha Stadium, one of the County's primary recreation facilities. Children and their parents will be able to ride their bicycles or walk to sporting events and practices rather than driving. Intersection improvements at Hoolako Street and Puaole Street will provide safer bicycle and pedestrian connections to the proposed Puaole/Malae bicycle boulevard (project 7).



PROJECT DESCRIPTION

5. Civic Center to Convention Hall Shared Use Path - Estimated Cost: \$2,549,000

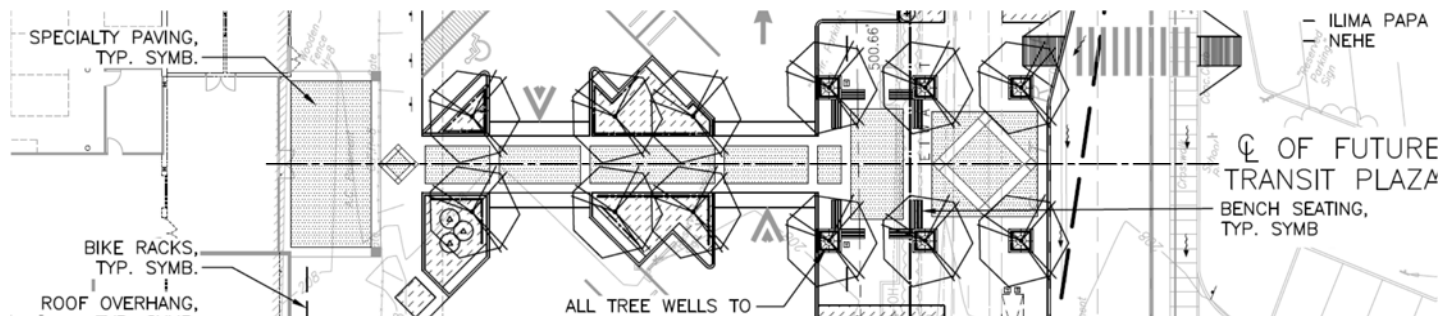
The project will construct a concrete shared use path that will connect transit and other services at the Civic Center, the Eiwa Street transit hub, Wilcox Elementary School, Līhu'e Ballfields, and Convention Hall/Creative Technology Center. The shared use path will allow for better parking management of existing parking resources at the Civic Center and Convention Hall. The shared use path is generally 10 feet wide. Along Umi Street, the "path" will be a sidewalk widened to 8 feet with adjacent on-street bike lanes. The total path length from Eiwa Street to Hardy Street is approximately 2,000 feet. Drainage at the Līhu'e Ballfields and Convention Hall parking lot will be greatly improved by incorporating enhanced drainage swales adjacent to the path. Currently, storm drainage floods the existing Convention Hall parking lot during intense storms. Swale enhancements will both retain and filter stormwater leading to improved water quality.



PROJECT DESCRIPTION

6. Civic Center Transit Services - Estimated Cost: \$790,000

Currently, transit services such as lost and found, scheduling questions, and purchases of bus passes are managed at the Kaua'i Bus baseyard at a remote Līhu'e location not easily accessed by bus patrons. The project proposes to renovate a portion of an existing vacant building so that these services can be relocated to the Līhu'e Civic Center adjacent to the Eiwa Street transit hub. Restrooms accessible to transit patrons during bus operating hours will also be constructed. Total square footage is estimated at 2,400 square feet. A new façade will transform what is now the dilapidated side of the vacant building into an attractive and welcoming entry. The pedestrian walkway connecting Eiwa Street to the Transit Services center will be constructed as part of the Eiwa Street improvements (project component 1).



Plan view of pedestrian connection between Eiwa Street and Civic Center Transit Services entrance



Existing façade...

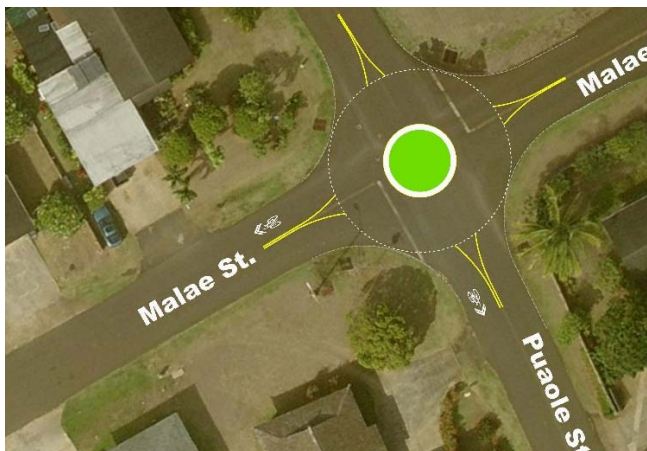


...to be transformed as the new Transit Services Center

PROJECT DESCRIPTION

7. Puaole/Malae Bicycle Boulevard. Estimated Cost - \$291,000; Total of all Project Components - \$17,806,000

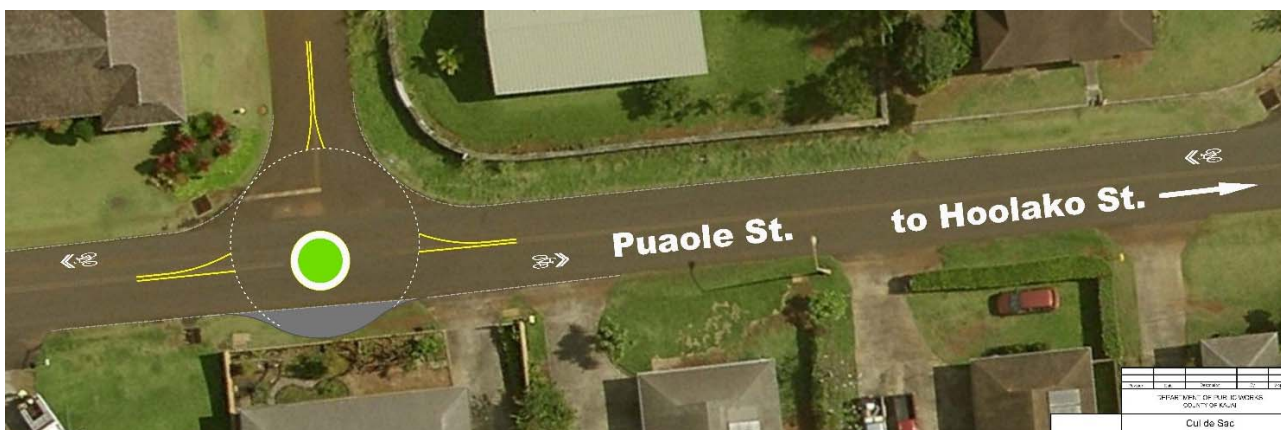
The proposed project will construct a bicycle boulevard, approximately 2,200 feet in length, between Hardy and Hoolako Streets, and parallel to Rice Street. This will provide a bicycle connection to Hardy Street and Wilcox Elementary School for bicycle riders that desire a calmer bicycling experience than Rice Street. Bicycle Boulevard improvements include signage, striping changes, and three mini-circles to calm traffic.



A. Puaole/Malae intersection – Hardy St. is to left



B. Puaole St. at Unahe St.



C. Puaole St. near Hoolako St.

PROJECT LOCATION

General location

This project is located in the County of Kauaʻi, State of Hawaiʻi. The County of Kauaʻi is comprised of the islands of Kauaʻi and Niʻihau. The County of Kauaʻi is the local jurisdiction. While there are designated place names within the County, there are no incorporated cities or towns. The town of Līhuʻe is the County seat and the governmental center with both State of Hawaiʻi and County offices located at the Līhuʻe Civic Center. Līhuʻe is also a judicial district designation. The district of Līhuʻe extends between the Wailua River on the north to Kīpū and Kīpū Kai to the west. The Līhuʻe Town Core is the historic civic, commercial and cultural center of both the Līhuʻe District and the entire County.

Income and Population

The median household income for the Līhuʻe District is \$67,499. The median value of owner-occupied housing units in the Līhuʻe District is \$463,800. The population of the County of Kauaʻi (2010) is 67,091. The population of the Līhuʻe District (2010) is 14,683. (Līhuʻe Community Plan and <http://quickfacts.census.gov/qfd/states/15/1545200.html>)

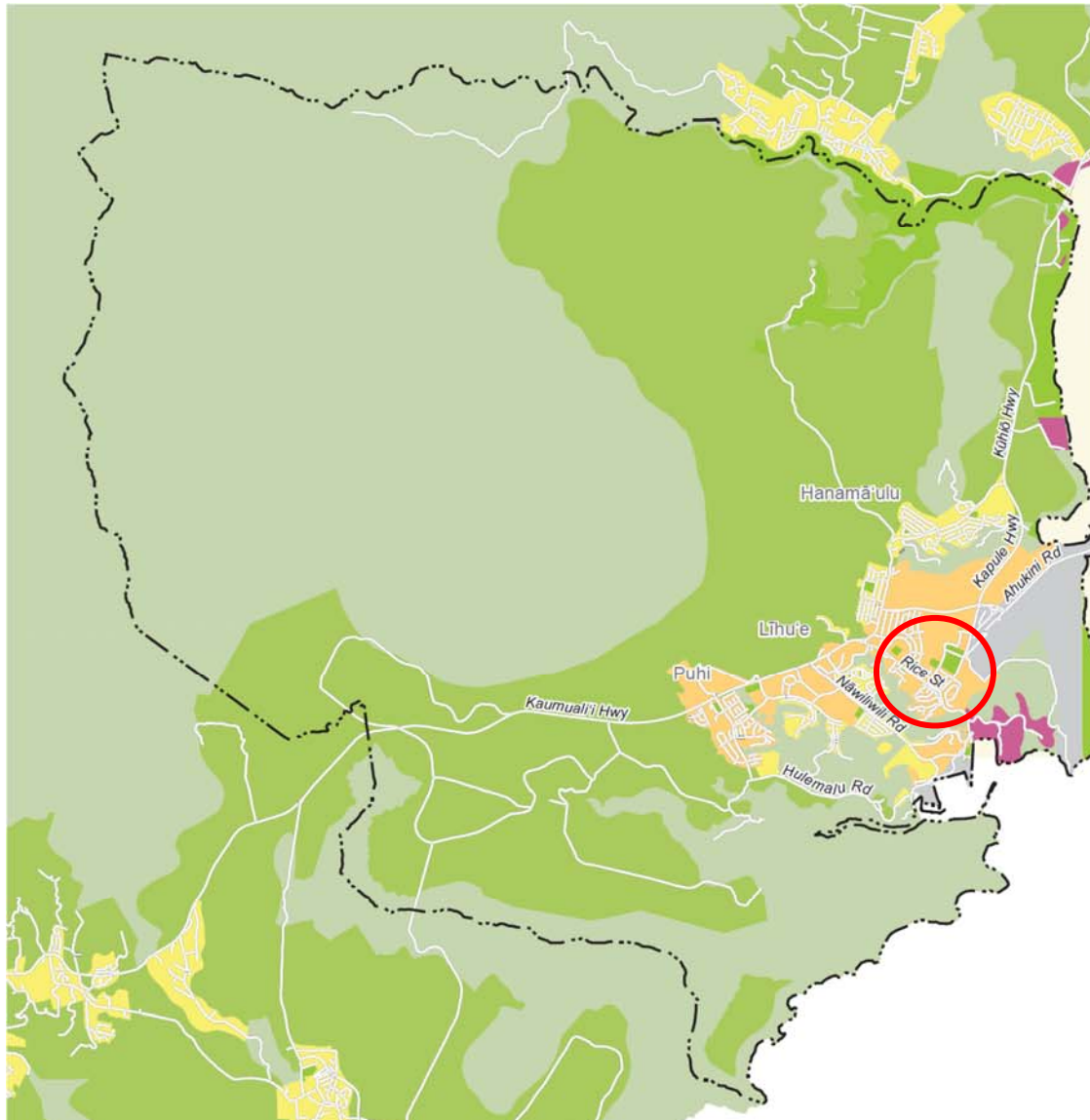
Transportation

Līhuʻe is also the transportation hub of the island. The major harbor and airport for the County are located within the Līhuʻe District and adjacent to the Līhuʻe Town Core. The two highways that form the major belt system around the island for vehicles and freight meet in Līhuʻe. Kūhiō Highway (Route 56) extends to the east and north, and Kaumualiʻi Highway (Route 50) extends to the west. Using the belt highways, the major mainline routes of The Kauaʻi Bus transit system also meet in Līhuʻe: Routes 100 and 200 connect between Līhuʻe and Kekaha to the west; Routes 400 and 500 connect between Līhuʻe and Hanalei to the east and north; Routes 800 and 850 connect to Wailua neighborhoods and Kapaʻa to the east. A local shuttle also operates through Līhuʻe, (Route 70), with connections to Līhuʻe Airport, Nāwiliwili Harbor, Wilcox Hospital and the Kukui Grove commercial area. (<http://www.kauai.gov/Government/Departments/TransportationAgency/BusSchedules/tabid/208/Default.aspx>)

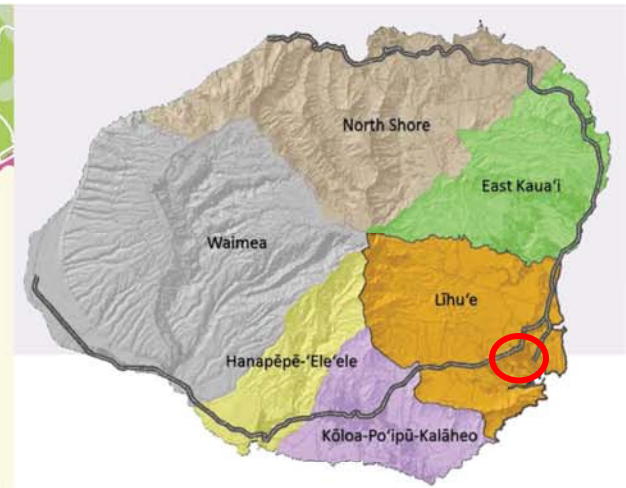
Employment

According to the Līhuʻe Community Plan, 37.4% of the establishments providing employment in the County are located in the Līhuʻe District. The number employed in the Līhuʻe District in 2010 was estimated at 10,239. This includes both residents of Līhuʻe and residents of other districts. The top three industries in the Līhuʻe District are: Arts, Entertainment, Recreation and Accommodation and Food Service; Retail Trade; and Educational Services, Health Care and Social Assistance. Major employment centers include the following: Wilcox Hospital, Līhuʻe Civic Center (State and County offices), Līhuʻe Airport, Nāwiliwili Harbor, Kauaʻi Marriott Resort, Kukui Grove Shopping Center, and Kauaʻi Community College.

PROJECT LOCATION



Lihue District (Source: Lihue Community Plan)



Island of Kauai (Source: Lihue Community Plan)



State of Hawaii (Source: NationalAtlas.gov)

PROJECT PARTIES

County of Kauai

Grant recipient, lead agency.

<http://www.kauai.gov/>

Hawai'i Department of Transportation (HDOT)

This project will be managed through the State Transportation Improvement Program (STIP). Therefore, HDOT will have project and funding oversight responsibilities.

<http://hidot.hawaii.gov/>

Hawai'i Department of Education (DOE)

DOE owns and operates Wilcox Elementary School, adjacent to the Civic Center Shared Use Path. They will review and comment on final design and engineering plans for the shared use path. A segment of the shared use path is on DOE property. A joint use or licensing agreement will be developed between DOE and the County to define use, maintenance and liability for the path.

<http://www.hawaiipublicschools.org/Pages/home.aspx>

Get Fit Kaua'i (GFK)

Get Fit Kaua'i is a community coalition that serves as a bridge-builder between Kaua'i residents and County and State government, focusing on building a healthier community. GFK is funded by the State of Hawai'i Department of Health's Healthy Hawai'i Initiative (HHI) through a contract with the University of Hawai'i at Mānoa. Two of GFK's task forces have been actively involved with the development of this project: the Built Environment Task Force and the Safe Routes to School Task Force. GFK will continue to assist with public outreach through construction.

<http://getfitkauai.com/>

Līhu'e Business Association (LBA)

The Līhu'e Business Association is dedicated to creating a more prosperous future for the Līhu'e District of Kaua'i – economically, socially, culturally and environmentally. LBA will serve as a conduit of information to Līhu'e businesses and residents throughout the project.

<https://www.facebook.com/groups/761852760516442/>

Letters of support from project parties are included in Appendix E. Support letters from other project stakeholders can be found on the County's TIGER website.

GRANT FUNDS

The total cost of TIGER-funded project components is estimated at \$17,806,000. The non-Federal match is \$2,675,000. The amount of TIGER funding requested is \$15,131,000. The local match is 15% of the total project cost.

Local match funding sources include the following:

Kaua'i County CIP Line Items

Complete Streets Safety Improvements:	\$250,000
Rice Street Improvements	\$200,000
Eiwa Street:	\$300,000

Kaua'i County Operating Budget Line Items

Complete Streets:	\$100,000
Safe Routes to School:	\$100,000

Special Funds

Bicycle License Fund:	\$250,000
SRTS Special Fund:	\$180,000

<i>General Fund:</i>	\$1,295,000
----------------------	-------------

<i>Total:</i>	\$2,675,000
---------------	-------------

Funding Sources

Funding sources for CIP, Operating Budget and General Fund line items include a local Bond Fund, Highway Fund, and the General Fund. Special Funds are received through fees: bicycle license fees and a statewide surcharge on moving violations (SRTS special fund) that is distributed to counties by the State of Hawai'i. There are no federally funded components to the local match.

GRANT FUNDS

Importance of TIGER Funding to Complete the Project

TIGER funding is ideal as it allows the County to complete this multimodal project in an expedited manner. Not all components are eligible for other funding sources. Without TIGER, County funds will not be sufficient to complete all components and timelines for project completion will be extended by years if not decades. Below is a summary of project components and potential funding sources if TIGER funding is not awarded.

<i>Description</i>	<i>Potential Funding Source</i>	<i>Comments</i>
1. Eiwa Street	Local Funds only	Is not eligible for traditional Federal-Aid highway funding. Local funds are not sufficient to complete Eiwa Street.
2. Rice Street	STIP	Is eligible for Federal-Aid funding. If built through STIP, construction would be delayed by at least two-three years based on current STIP schedule.
3. Hoala and Kalena Sidewalks	CDBG	Is CDBG eligible, but construction would be delayed and will compete against other CDBG priority projects.
4. Hoolako Street Bicycle and Pedestrian Facilities	MAP 21 Transportation Alternatives Program (TAP)	TAP funds are extremely limited in Hawai'i. Project needs greatly exceed statewide funding availability.
5. Civic Center Shared Use Path	MAP 21 Transportation Alternatives Program (TAP)	TAP funds are extremely limited in Hawai'i. Project needs greatly exceed statewide funding availability.
6. Civic Center Transit Services	Local funds only	Local funds are not sufficient to complete this component.
7. Puaole/Malae Bicycle Blvd.	Safe Routes to School grant funding	This is a potential funding source, but funding is limited and competitive throughout the State, and construction would most likely be delayed.

SELECTION CRITERIA

Safety

As noted in the Transportation Challenges section above, the project addresses numerous safety issues. According to 2009-2011 data from HDOT, three intersections on Rice Street have had at least three accidents in three years. In addition, a pedestrian fatality occurred on Rice Street in 2014. The current four-lane configuration of Rice Street leads to sight line problems at intersections and crossings for both vehicles and pedestrians. The proposed lane conversion from four to three lanes will improve sight lines for all users. The addition of either curb extensions or median refuges (depending on location) will improve sight lines for pedestrians and reduce crossing distance.

Many people have commented at public meetings that they do not feel safe riding bicycles in this area. Some bicyclists ride on the sidewalk, endangering themselves and pedestrians. The dedicated bike facilities will improve safety for bicyclists and pedestrians, and encourage bicycle use.

According to parent surveys of fourth and fifth graders at Wilcox Elementary, while 60% of children live within 2 miles of the school, only 3% walk or bike to school in the morning. Safety concerns are the primary reason stated as to why children do not walk or bike to school. The proposed improvements will complete safe pedestrian and bicycle connections to neighborhoods.

The project significantly improves a safe, connected, and accessible transportation system for the multimodal movement of goods and people.

State of Good Repair

This project completes the transformation of what is now an automobile-centered transportation network into a multimodal system that can be sustained over time.

The existing condition of the project area threatens network efficiency and mobility of people by not providing adequate bicycle and pedestrian facilities and access to transit. Traffic congestion is exacerbated at school drop-off and pick-up times due to lack of alternative means for children to access school. Economic revitalization of the Līhu'e town core as a dynamic, mixed-use, pedestrian friendly center is problematic when the transportation network does not support the desired private investments. The proposed improvements will support mode shift from auto to bicycle, pedestrian, and transit, thereby enhancing efficiency and mobility and supporting economic revitalization.

SELECTION CRITERIA

The project also supports compact infill development instead of sprawl. Over the long term, this will result in more efficient use of existing roadways rather than expanding the number of lane miles by widening existing roads and adding new roads, which would require higher levels of maintenance.

Frequencies for routine road repair, such as resurfacing and restriping, will be lengthened due to mode shift and related reductions in vehicle miles travelled (VMT). The County will maintain the roadways and other surfaces through the Department of Public Works Roads Division. The Roads Division uses maintenance management software to track, establish priorities, and schedule regular road maintenance. Long-term maintenance of the improvements will be incorporated into the Roads Division's maintenance management program.

Landscape improvements will include native and other plants that are non-invasive and adapted to the local microclimate. Trees will be selected with non-invasive roots and to have the appropriate size and branching habit at maturity. Tree planting will include low-flow tree bubblers on separate valves to encourage deep root growth that will not uplift pavements or sidewalks. Trees will be appropriately located taking into account sight lines along with overhead and underground utilities. All plants will be selected to fit the planting areas with minimal hedging, pruning and other repetitive landscape tasks. Landscape maintenance will occur through the Parks Department's beautification crew which manages both parks and streetscapes.

Economic Competitiveness

Housing + Transportation Costs

According to the Center for Neighborhood Technology Housing plus Transportation Index (H+T Affordability Index, <http://htaindex.cnt.org/map/>), the combined cost of housing plus transportation for Līhu'e is 60% of household income, with transportation costs alone at 24% of household income. The County's *Multimodal Land Transportation Plan* (http://movekauai.net/?page_id=520) sets a goal of combined H+T costs to not exceed 50% of household income, with the transportation component not exceeding 20%. These transportation costs will be lowered through mode shift, with more trips being achieved by walking, bicycling and transit. The opportunity for mode shift also provides families the choice to reduce their vehicle ownership. This project develops the multimodal infrastructure required for mode shift and reduced H+T costs.

Community Revitalization

The Līhu'e Town Core Urban Design Plan

(<http://www.kauai.gov/Government/Departments/PlanningDepartment/Projects/LihueTownCoreUrbanDesignPlan/tabid/546/Default.aspx>) sets the vision for a revitalized, walkable mixed use town center supported by a multimodal transportation network. This

SELECTION CRITERIA

project completes the transportation component of the *Urban Design Plan*, and serves as a catalyst for private investment and infill development.

Access to Employment and Education

Through improved pedestrian, bicycle, and transit access, along with redevelopment and investment in commercial areas, neighborhoods will be better connected to jobs and educational opportunities from childhood through adulthood.

Quality of Life

Ladders of Opportunity

As noted in the “Ladders of Opportunity” section of this narrative, by improving the multimodal transportation infrastructure, this project increases transportation choice and access to services, including access for disadvantaged groups, such as seniors and low-to-moderate income residents.

Health

As noted in the State of Hawaii’s *Physical Activity and Nutrition Plan (the PAN Plan, <http://health.hawaii.gov/physical-activity-nutrition/files/2013/08/Hawaii-PAN-Plan-2013-2020.pdf>)*, in 2011, 76% of adults, 75% of high school students, and 80% of middle school students did not get the recommended amount of daily physical activity. Only 40% of Hawaii’s adults had a healthy body weight, with nearly 22% considered obese.

Recognizing the relationship of inactivity and obesity to chronic diseases such as heart disease and diabetes, the State’s PAN Plan, along with the County’s *Community Health Needs Assessment* and *Community Health Improvement Initiative* (<http://health.hawaii.gov/kauai/>), identify improvements to the built environment that encourage active transportation as a top priority to improve health.

The project improves individual and community health for all ages and abilities by providing choice for active transportation to be incorporated into daily life.

Livability Principles

This project furthers all six of the Partnership for Sustainable Communities “Livability Principles.” Regarding the first principle, “Provide more transportation choices,” this project invests in bicycle, pedestrian and transit infrastructure, while also making the project area safer for vehicle use. It achieves the goal of developing “safe, reliable and economical transportation choices to decrease household transportation cost, reduce our nation’s dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.” (Goal 1)

SELECTION CRITERIA

Coordinated Land Use Planning

This project is coordinated with current and past land use plans, including the *Līhu'e Town Core Urban Design Plan* (2010), and the Draft *Līhu'e Community Plan* (approved by Planning Commission in 2014, currently at County Council for final approval, <http://lihuecp.com/>). The project will provide the multi-modal transportation system required to achieve the vibrant mixed use center envisioned in these plans.

The project also implements key transportation plans and policies, including the County's *Multimodal Land Transportation Plan*, and Kaua'i's Complete Streets Resolution, the first County complete streets resolution in the State of Hawai'i.

Consistency with Technical Assistance

The County of Kaua'i received technical assistance from Smart Growth America (funded by EPA Building Blocks for Sustainable Communities) and held a Parking Audit Workshop on May 14-15 2014. (<http://www.smartgrowthamerica.org/2014/06/10/county-of-kauai-hi-seeks-parking-solutions-for-lihue-town-core/>) "Next steps" that arose out of the technical assistance included: completing the design for Rice Street with community involvement; developing a shared use path to connect Civic Center and Convention Hall parking resources; and developing an overall Līhu'e Town Core Multimodal Access and Circulation Plan (Next Steps Parking Audit memo). All of these items have been achieved and form the basis for this application.

As a follow-up to the technical assistance, the County did a week-long intensive community outreach and design effort for Rice Street in November 2014 called "Rice Street Week." The outcome of that process is the design basis for the Rice Street component of this project. More information on Rice Street Week is available at

<http://www.kauai.gov/Government/OfficeoftheMayor/TIGERGrant/tabid/192/Default.aspx>

Environmental Sustainability

The mode shift and VMT reduction component of this project results in reduced energy consumption, reduced dependence on oil and reduced greenhouse gas emissions. Water quality is improved by incorporating bioswales to filter and detain stormwater. Environmental impacts are minimized as all construction is located in previously disturbed areas. Native plants will be incorporated into the plant palette.

Innovation

The project will be constructed using design-build as the project delivery method. The County has experience with design-build. Most recently, the Hardy Street project is being constructed through a design-build contract. HDOT also has experience on Kaua'i with design-build and supports this delivery method.

SELECTION CRITERIA

Partnership

Jurisdictional and Stakeholder Collaboration

Along with the County, project partners include HDOT, which will oversee the project as a part of the STIP, and DOE, which will participate in the final engineering and agreements for construction of the Civic Center shared use path adjacent to Wilcox School. DOE is also a strong partner in the County's Safe Routes to School program.

The *Līhu'e Town Core Urban Design Plan*, *Līhu'e Community Plan*, Parking Audit Workshop and Rice Street Week all had extensive outreach components engaging community stakeholders. The County will continue to partner with numerous agencies and organizations, including Get Fit Kaua'i and the Līhu'e Business Association to provide outreach to community members throughout the construction process.

Disciplinary Integration

This project crosses transportation modes and includes improvements for bicycles, pedestrians, vehicles and transit. It brings together multiple County agencies, including the Department of Public Works, Planning Department, Transportation Agency, Parks Department, Housing Agency and Office of Economic Development. The project components have been developed collaboratively with the participation of other agencies, including the State Department of Health and Department of Education. The community recognizes the benefits of this project across disciplines, including transportation, housing, education, health, economic development, historic preservation, and recreation. This project is a direct outcome of technical assistance received through EPA's Building Blocks for Sustainable Communities program (technical assistance provided by Smart Growth America).



RESULTS OF BENEFIT COST ANALYSIS

The benefit cost analysis shows a net benefit of \$29,830,308 over a 20-year timeframe and discounted at 7%. Taking into account only the quantitative benefits noted below, the Benefit-Cost ratio is 1.68:1. More information on the Benefit Cost Analysis is provided in Appendix B.

Safety

Quantitative benefit from reduced crashes on Rice Street is estimated at \$6.4 million over the 20-year timeframe.

This is based on analyzing crash data provided by HDOT along Rice Street within the project area from 2007-2011 (the most recent five-year quantifiable data available) applying Abbreviated Injury Scale (AIS) values to crashes, and then estimating a 30% reduction in crashes based on the implementation of a road diet along Rice Street (FHWA Road Diet Informational Guide, Chapter 2, page 7 and www.cmfclearinghouse.org)

Quantitative benefit from reductions in fatalities on Rice Street is estimated at \$14.3 million over 20 years.

A review of crash records by the Kaua'i Police Department (KPD) indicates that there were 10 fatalities on Rice Street during the 37 year period from 1978-2014. The most recent fatality was a pedestrian within the project area in 2014. The crash record demonstrates on average one fatality every 3.7 years on Rice Street, but the exact location on Rice Street and the causes of each fatal crash are not known. Based on crash data between 2007 and 2011, there were 40 injuries on the portion of Rice Street within the project area, and 34 injuries on the portion of Rice Street outside of the project area. Using this ratio of injury locations as a surrogate for fatality locations, a fatal crash is estimated to have historically occurred within the project area on Rice Street approximately once every 6.9 years. The road diet and other improvements to Rice Street are anticipated to reduce the likelihood of fatal crashes on the project portion of Rice Street by at least 50 percent.

Qualitative benefit of increased safety for all users throughout the project area

Due to the relatively small number of crashes on roads other than Rice Street within the project area, only Rice Street was included in the quantitative analysis.

State of Good Repair

Qualitative Benefits include reduced maintenance cost from extended life of pavements due to reduced VMT and reduced speeds.

RESULTS OF BENEFIT COST ANALYSIS

Economic Competitiveness

Quantitative benefit from increased tax revenues due to infill development is estimated at \$9.5 million over 20 years.

The proposed transportation improvements will serve as a catalyst for economic development of the town core, resulting in higher density mixed-use infill projects as encouraged in the Lihue Town Core Urban Design Plan. This will result in estimated increased tax revenue, based on a parcel by parcel analysis of permitted zoning and development potential.

Qualitative benefit of reduced H+T costs for Līhu'e residents

As a result of this project, the combined household Housing + Transportation (H+T) costs for Lihue residents and commuters are expected to decrease, based on reductions in per capita VMT due to more walking, bicycling and transit use, availability of housing closer to work through mixed use development, and potential for reduced housing cost through providing a better mix of housing types. The County's *Multimodal Land Transportation Plan* establishes a goal of reducing H+T costs from 60% to 50% of household income.

Quality of Life

Qualitative benefit of ladders of opportunity

This project provides ladders of opportunity for low-to-moderate income residents and seniors through improved bicycle and pedestrian infrastructure and access to transit. The proposed improvements will connect disadvantaged neighborhoods to jobs, education, health care and other vital services, cultural facilities, and recreation, both within the Lihue town core and regionally.

Qualitative health benefits

The project reduces family and public health costs by providing choice for people of all ages and abilities to incorporate active transportation into their daily lives.

Environmental Sustainability

Quantitative benefit of decrease in greenhouse gas emissions due to reduced VMT is estimated at \$1.9 million over 20 years.

Qualitative benefit of increased water quality

Water quality is expected to increase based on incorporation of bioswales into the design that detain and filter stormwater.

PROJECT READINESS

Technical Feasibility

Pre-construction activities

Concept design has been completed for each project component. Pre-construction activities are required prior to fund obligation. This includes preparation of 30% engineering plans, specifications, and estimate for design-build procurement and completion of environmental documents. The project schedule demonstrates completion of all pre-construction activities before June 30, 2017.

In order to expedite pre-construction activities, the process to advertise for and select a consultant team to complete the design-build procurement package and environmental documents will begin in July 2015, prior to notice of TIGER funding. The intent is for the consultant team to be ready to begin final design and environmental clearances immediately on notice of grant award and approval of a grant agreement.

Project Management

The project will be managed through the County's DPW and will be incorporated into the STIP. HDOT has agreed to provide oversight through STIP. DPW has extensive experience managing numerous similar STIP projects with oversight from HDOT and FHWA. Previous and ongoing STIP projects include Hardy Street complete streets renovation; Puhi Road reconstruction; Kapa'a to Lihue shared use path multiple phases; and numerous road resurfacing and safety improvement projects.

Given the County's extensive experience on similar Federally-funded projects and established HDOT/FHWA-approved procedures for design/build procurement, the County has the experience and capacity to manage this project successfully and meet the deadlines for fund obligation and completion of construction.

Financial Feasibility

A project cost estimate and funding by phase is shown below. More detailed cost estimates are included in appendix C.

Costs by phase

<i>Phase</i>	<i>Project Component</i>							<i>Cost</i>
	Eiwa Street	Rice Street	Hoala/ Kalena Sidewalks	Hoolako Bike Blvd	Civic Center Convention Hall Shared Use Path	Civic Center Transit Services	Puaole/Malae Bicycle Blvd.	Total Cost
Pre- Construction	\$93,000	\$635,000	\$27,000	\$209,000	\$189,000	\$59,000	\$22,000	\$1,234,000
Construction	\$2,332,000	\$7,938,000	\$331,000	\$2,611,000	\$2,360,000	\$731,000	\$269,000	\$16,572,000
Total	\$2,425,000	\$8,573,000	\$358,000	\$2,820,000	\$2,549,000	\$790,000	\$291,000	\$17,806,000

PROJECT READINESS

Funding by phase

<i>Phase</i>	<i>Cost</i>	<i>Funding</i>		
	Total Cost	TIGER Request	Local Match	Total Funding
Pre-Construction	\$1,234,000	\$1,048,900	\$185,100	\$1,234,000
Construction	\$16,572,000	\$14,086,200	\$2,485,800	\$16,572,000
Total	\$17,806,000	\$15,135,100	\$2,670,900	\$17,806,000

The County of Kauai is fiscally sound and has the experience and capability to manage Federally-funded projects.

Project Schedule

The detailed project schedule found in Appendix D indicates the ability to obligate funds prior to June 30, 2017, and for TIGER funds to be expended prior to September 30, 2022. A summary of the schedule includes the following tasks and timelines:

July - December 2015	Procurement of Engineering and Environmental Consultants to complete design/build procurement package and environmental clearances.
October - December 2015	Notice of conditional grant award and negotiation of grant agreement with DOT
January 2016 - April 2017	Complete Design-Build PS&E and Environmental/Permitting Clearances
April – June 2017	Final Reviews/Approvals for Fund Obligation with HDOT/FHWA
June 2017 - February 2018	Design/Build Procurement and Notice to Proceed
March 2018 – May 2020	Design/Build Final Design, Permitting and Construction
June 2020 – May 2021	Plant Establishment and Maintenance
June – August 2021	Project Closeout

Required Approvals

All work is in areas that have been previously disturbed. There is no land in private ownership. Therefore, a NEPA Categorical Exclusion (CatEx) is anticipated. This is consistent with the CatEx that was recently prepared for Hardy Street, a similar project. Much of the environmental work that was done for Hardy Street will be applicable to this project.

Based on preliminary informal conversations with the State Historical Preservation Division (SHPD) and past experience on Hardy Street, a Section 106 “no adverse effect” finding is anticipated for this project. Much of the literature search for potential historic resources has already been accomplished for the project area through the Hardy Street project and the 2007 Civic Center Master

PROJECT READINESS

Plan State of Hawai'i Environmental Assessment (EA). Most of the Area of Potential Effect (APE) for the Eiwa Street component was included in the Hardy Street project. No Section 7 Consultation issues are anticipated. No Section 4(f) issues are anticipated. No Army Corps of Engineers regulatory permits are required. The project qualifies for exemptions from State environmental review in conformance with Hawaii Revised Statutes Chapter 343. A National Pollutant Discharge Elimination System (NPDES) permit will be obtained by the Design/Build contractor. The State of Hawaii Disability and Communication Access Board (DCAB) will review the plans prepared by the Design/Build contractor.

In summary, there are no known environmental or permitting issues that would cause a delay in securing obligation of funds before June 30, 2017. The project will be incorporated into the STIP once notice is received of grant award and during negotiation of the grant agreement.

Project Risks and Mitigation Strategies

The following table summarizes potential project risks and mitigation strategies.

<i>Risk</i>	<i>Mitigation Strategy</i>
Unknown environmental issues extend NEPA process	Only project components in disturbed ROW with no acquisition issues are included. The project schedule includes contingency time in the event a process is delayed.
Unknown historical/cultural resources extend the Section 106 process	Preliminary informal conversations with SHPD have already occurred. All work is in previously disturbed areas minimizing archeological disturbance. Archeological monitoring may be a condition, but that would not delay fund obligation. The project schedule includes contingency time in the event a process is delayed.
There is a protest during professional services procurement or design/build bidding.	Procurement policies/procedures and bidding templates already approved by HDOT and FHWA and used successfully by the County without protest will be followed, minimizing likelihood of protest.
A financial crisis causes loss of funding.	County Council has already approved the grant application.
The project is over budget.	Contingency funds are included in the cost estimates. Value engineering can occur during design/build if needed.
County Council has a change of heart regarding design of project components.	County Council has already approved the grant application. All project components are the result of extensive community input and are included in Council-approved plans.